

Maine Weekly Influenza Surveillance Report

March 4, 2009

Synopsis

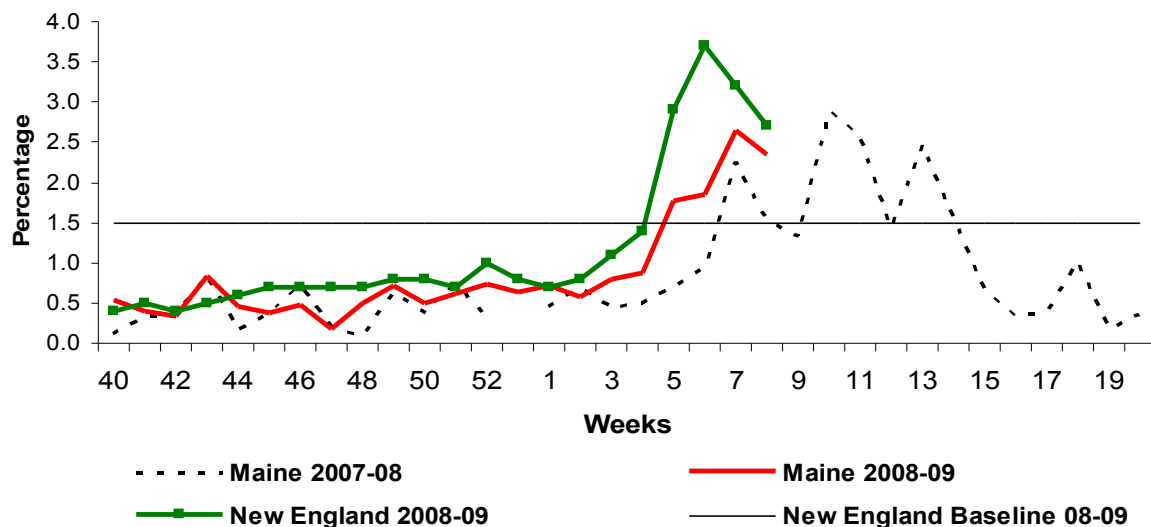
During the week ending February 28th, 2009 (MMWR week 8)*, Maine reported widespread influenza activity. Both lab confirmed influenza, and influenza detected by rapid testing decreased this week. To date, 34 positive influenza A samples have been subtyped by the Maine Health and Environmental Testing Laboratory (HETL): 32 were A H1, and two were A H3. There were six new outbreaks of influenza-like illness reported during week 8, four in long term care facilities, and two in schools. Three outbreaks were in the Western district, two in the Central district, and one in Cumberland district. Outpatient influenza-like illness visits decreased slightly this week, as did emergency visits detected through syndromic surveillance.

Moderate Disease Surveillance

Outpatient influenza-like illness (ILI)

During the week ending February 28th, 2009, 2.4% of outpatient visits reported by eleven Maine Sentinel Providers were for influenza-like illness (ILI). ILI is defined as fever ($\geq 100^{\circ}\text{F}$ / $\geq 37.8^{\circ}\text{C}$) AND cough or sore throat in the absence of a known cause. In the New England States, 2.7% of outpatient visits were attributed to influenza-like illness during week 8. Maine remains above the New England baseline.

Outpatient Visits for Influenza-like Illness – Maine, 2007-09



New England is defined as Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.

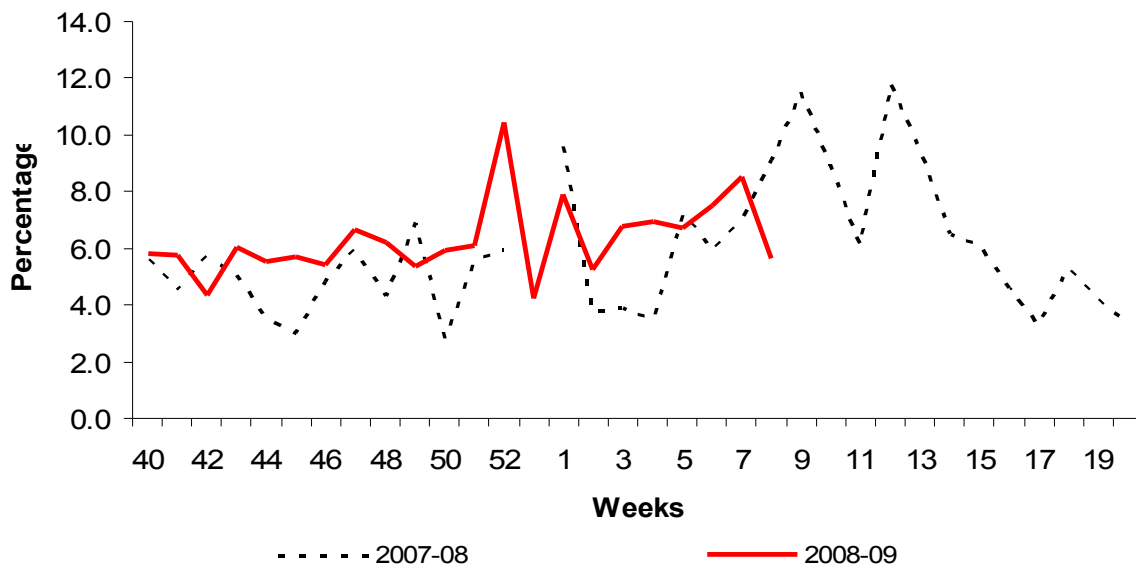
* At time of publication, reporting may be incomplete. Numbers presented here may change as more reports are received.

Severe Disease Surveillance

Hospital inpatients

During the week ending February 28th, 2009, 5.7% of hospital admissions reported by three hospitals were attributable to pneumonia or influenza.

Hospital Admissions Due to Pneumonia or Influenza -- Maine, 2007-09

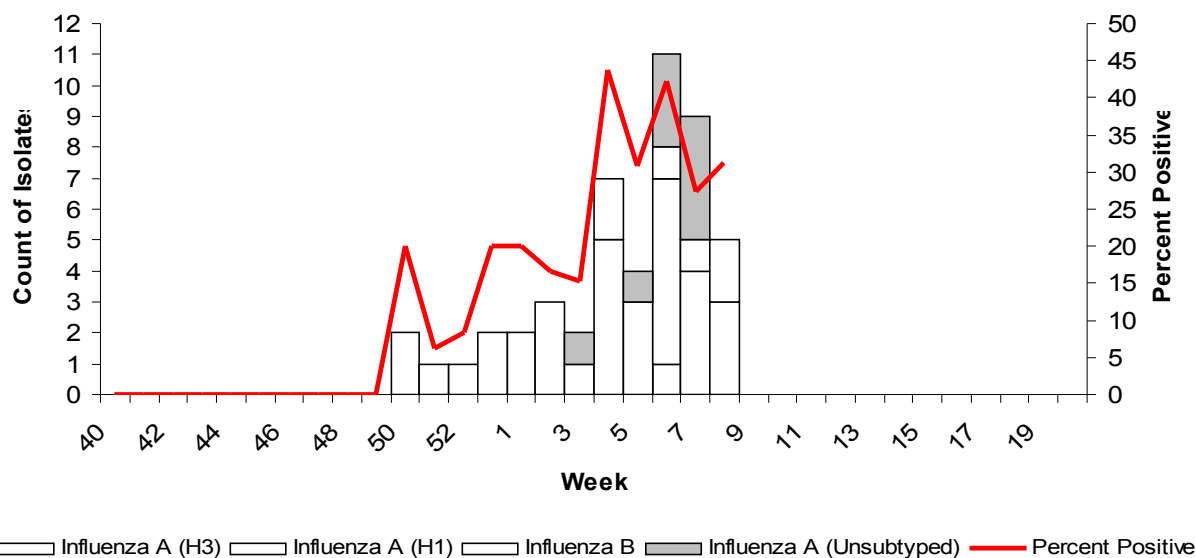


Laboratory Reporting

During the week ending February 28th, 2009, 16 samples were submitted for testing to the Maine Health and Environmental Testing Laboratory (HETL). Five (31.3%) tested positive for influenza. Three were positive for influenza A, H1, and two were positive for influenza B.

To date, 232 samples have been submitted, 49 (21.1%) were positive for influenza: 32 for influenza A H1, two for influenza A H3, nine for influenza A unsubtype, and six for influenza B.

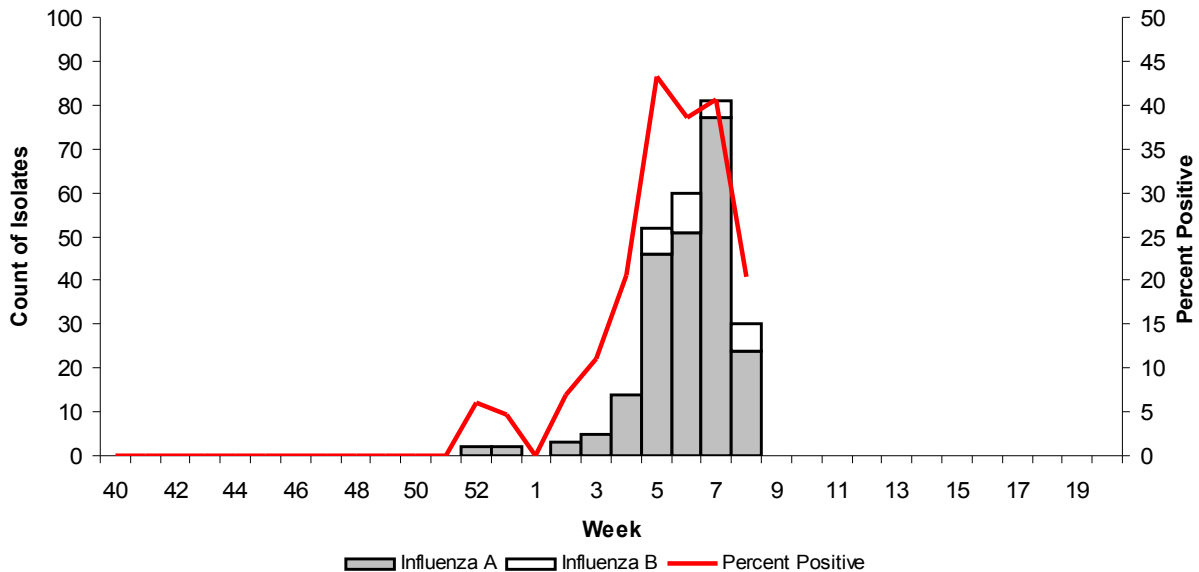
Respiratory Specimens Positive for Influenza from HETL, Maine, 2008-2009



During the week ending February 28th, 2009, 144 samples were submitted for testing to two private reference laboratories, 24 tested positive for influenza A and six tested positive for influenza B. Twenty two samples were positive for RSV.

A combined total of 1,223 specimens have been submitted for respiratory testing to two private labs. To date, 224 samples were positive for influenza A, 25 samples were positive for influenza B, 118 samples were positive for RSV, ten samples were positive for parainfluenza 3, four samples were positive for adenovirus, and two samples were positive for enterovirus.

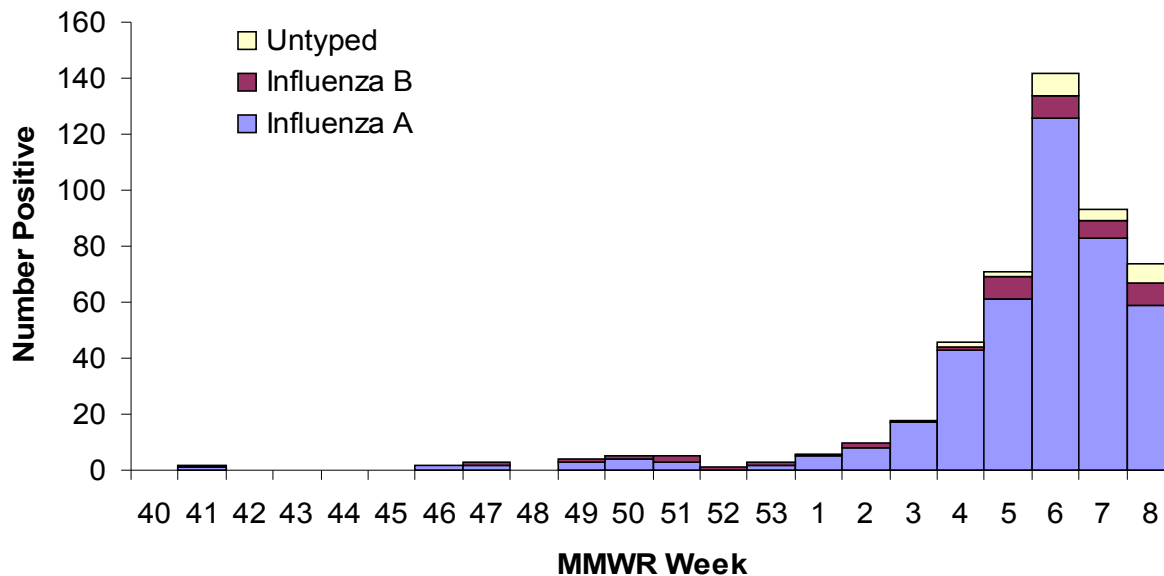
Respiratory Specimens Positive for Influenza from Two Reference Laboratories, Maine, 2008 - 2009



Rapid tests are often used in clinical practice and these results contribute to the determination of the state influenza activity code reported to the federal CDC. Many hospitals, laboratories, and physicians offices report these test results to the state. There is the possibility of duplication of results from reference labs and the rapid report called into the state. However, since influenza is not required to be reported, it is still assumed that these numbers are an underrepresentation of the true burden of influenza.

During the week ending February 28th, 2009, 74 samples tested positive using rapid testing, 59 for influenza A, eight for influenza B, and seven untyped samples. A combined total of 485 positive rapid tests have been reported this season. 419 were positive for influenza A, 42 were positive for influenza B, and 24 were not typed.

Positive Rapid Influenza Tests, Maine, 2008-2009



Outbreaks

During the week ending February 28th, 2009, six outbreaks of influenza-like illness were reported, four in long term care facilities, and two in schools. Three outbreaks were in the Western district, two in the Central district, and one in Cumberland district. Two of the outbreaks were confirmed as influenza A, two were confirmed as influenza B, and one was confirmed with both A and B strains. To date, 26 outbreaks of influenza-like illness have been reported; 12 in long term care facilities and 14 in schools.

Influenza-like illness outbreaks by selected characteristics – Maine, 2008-09

	Facility Type*	District	Date Reported	Attack Rate (%)		Hospitalizations #	Deaths #	Vaccination rate (%)		Lab-confirmed
				Resident	Staff			Resident	Staff	
1	LTC	Cumberland	11/21/2008	6	1	0	0	100	68	No
2	LTC	Mid Coast	1/22/2009	4	0	2	0	96	50	Influenza A
3	LTC	Western	1/26/2009	2	0	1	0	99	50	Influenza A
4	LTC	Cumberland	1/30/2009	2	0	1	0	96	64	Influenza A
5	School	York	2/2/2009	34	^	^	^	^	^	Influenza A
6	School	Penquis	2/4/2009	1	0	1	^	^	^	Influenza A
7	School	Mid Coast	2/9/2009	26	13	^	^	^	^	No
8	School	Mid Coast	2/9/2009	27	14	^	^	^	^	No

9	School	York	2/10/2009	^	^	^	^	^	^	^
10	LTC	York	2/10/2009	3	^	^	^	^	^	Influenza A
11	School	Downeast	2/10/2009	4	^	^	^	^	^	Influenza A
12	School	Mid Coast	2/10/2009	19	0	^	^	^	^	Influenza A & B
13	School	Mid Coast	2/2/2009	23	5	^	^	^	^	Influenza A
14	LTC	Mid Coast	2/10/2009	^	^	^	^	^	^	^
15	School	Mid Coast	2/10/2009	46	4	^	^	^	^	Influenza A
16	School	York	2/11/2009	15	^	^	^	^	^	^
17	School	York	2/11/2009	15	^	^	^	^	^	Influenza B
18	School	Western	2/13/2009	39	^	^	^	^	^	Influenza A
19	LTC	Mid Coast	2/17/2009	14	24	0	2	96	20	Influenza A
20	LTC	Western	2/19/2009	2	0	0	0	^	^	Influenza A
21	School	Central	2/23/2009	2	^	^	^	^	^	Influenza A & B
22	LTC	Western	2/23/2009	4	^	^	^	^	^	Influenza A
23	School	Western	2/25/2009	15	^	^	^	^	^	Influenza B
24	LTC	Western	2/25/2009	8	^	^	^	^	^	Influenza A
25	LTC	Central	2/26/2009	26	^	^	^	100	^	Influenza B
26	LTC	Cumberland	2/26/2009	^	^	^	^	^	^	^

* Outbreak definition is specific to facility type. An outbreak in long-term care facilities (LTC) is defined as ≥ 3 patients with ILI identified on same floor or ward during a short (e.g., 48-72 hour) period OR ≥ 1 patients with lab-confirmed influenza; an outbreak in an acute care facility (ACF) is defined as ≥ 1 patients with ILI or lab-confirmed influenza with symptom onset ≥ 48 hours post-admission (i.e., nosocomial); and an outbreak in a school is defined as $\geq 15\%$ absentee rate among student population due to ILI or lab-confirmed influenza.

^ Data unavailable

NA indicates not applicable

**Maine DHHS Districts:

York District: York county

Cumberland District: Cumberland county

Western District: Franklin, Oxford, and Androscoggin counties

Mid Coast District: Waldo, Knox, Lincoln and Sagadahoc counties

Central District: Somerset and Kennebec counties

Penquis District: Piscataquis and Penobscot counties

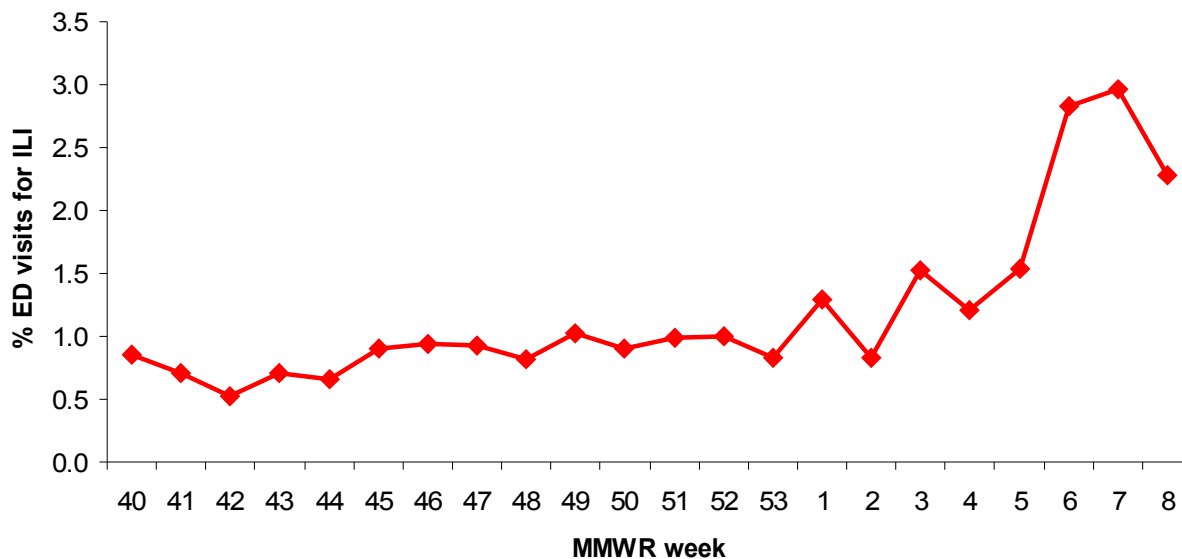
Downeast District: Washington and Hancock counties

Aroostook District: Aroostook county

Syndromic Surveillance

2.3% of visits to emergency departments at seven of Maine's hospitals were characterized as influenza-like illness during week 8, based on the patients' chief complaint.

Emergency Department Visits for ILI at Seven Hospitals – Maine, 2008-09

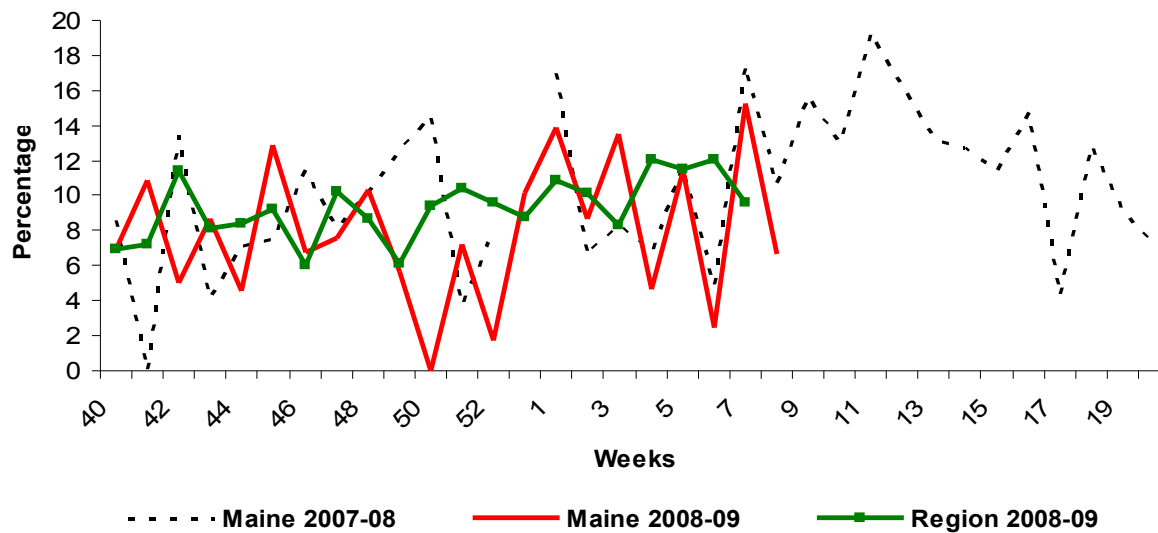


Fatalities Surveillance

Death Certificates

During the week ending February 28th, 2009, 6.7% of deaths reported by two city vital records offices were attributable to pneumonia and influenza.

Percentage of Deaths Attributable to Pneumonia and Influenza – Maine, 2007-09



Pediatric Fatalities

No influenza-associated pediatric deaths in Maine have been reported this season.

National Influenza Activity

State health departments report the estimated level of influenza activity in their states each week. States report influenza activity as: 1) no activity, 2) sporadic, 3) local, 4) regional, or 5) widespread (definitions of these levels can be found at: www.cdc.gov/flu/weekly/usmap.htm). Maine reported widespread activity for the week ending February 28th, 2009 (week 8).

